Department of Defense, total obligational authority for research, development, test, and evaluation, by DOD budget activity: FYs 2019–21

(Millions of dollars and percent change)

| Funding category and agency                        | Budget activity | 2019<br>actual | 2020<br>preliminary | 2021<br>proposed | 2019-20 (%<br>change) | 2020-21 (%<br>change) |
|--|-----------------|----------------|---------------------|------------------|-----------------------|-----------------------|
| RDT&E total budget authority                       |                 | 95,489         | 104,718             | 106,437          | 9.7                   | 1.6                   |
| R&D budget authority within RDT&E                  |                 | (1.000         | 67.064              | 66,052           | 9.7                   | -1.8                  |
| accounts <sup>a</sup>                              |                 | 61,292         | 67,264              | 00,032           | 9.7                   | -1.0                  |
| RDT&E total obligational authority <sup>b</sup>    |                 | 96,206         | 105,396             | 106,555          | 9.6                   | 1.1                   |
| Basic research                                     | 1               | 2,476          | 2,603               | 2,319            | 5.2                   | -10.9                 |
| Defense agencies                                   |                 | 777            | 828                 | 760              | 6.6                   | -8.2                  |
| Department of the Air Force                        |                 | 545            | 550                 | 492              | 0.8                   | -10.5                 |
| Space Force  |                 | na             | na                  | 0                |                       |                       |
| Department of the Army                             |                 | 491            | 574                 | 463              | 16.9                  | -19.3                 |
| Department of the Navy                             |                 | 662            | 651                 | 603              | -1.7                  | -7.3                  |
| Applied research                                   | 2               | 5,912          | 6,071               | 5,397            | 2.7                   | -11.1                 |
| Defense agencies                                   |                 | 1,874          | 1,996               | 1,980            | 6.5                   | -0.8                  |
| Department of the Air Force                        |                 | 1,482          | 1,656               | 1,410            | 11.7                  | -14.9                 |
| Space Force  |                 | na             | na                  | 131              |                       |                       |
| Department of the Army                             |                 | 1,554          | 1,259               | 923              | -18.9                 | -26.7                 |
| Department of the Navy                             | 3               | 1,002          | 1,160               | 953              | 15.7                  | -17.8                 |
| Advanced technology development                    |                 | 6,929          | 7,387               | 6,355            | 6.6                   | -14.0                 |
| Defense agencies                                   |                 | 3,660          | 3,982               | 3,612            | 8.8                   | -9.3                  |
| Department of the Air Force                        |                 | 876            | 1,066               | 779              | 21.7                  | -27.0                 |
| Space Force  |                 | na             | na                  | 0                |                       |                       |
| Department of the Army                             |                 | 1,562          | 1,532               | 1,204            | -1.9                  | -21.4                 |
| Department of the Navy                             |                 | 831            | 807                 | 760              | -2.9                  | -5.8                  |
| Advanced component development and prototypes      | 4               | 21,454         | 27,207              | 28,468           | 26.8                  | 4.6                   |
| Defense agencies                                   |                 | 9,821          | 10,562              | 9,437            | 7.5                   | -10.7                 |
| Department of the Air Force                        |                 | 6,386          | 8,289               | 7,738            | 29.8                  | -6.7                  |
| Space Force  |                 | na             | na                  | 1,311            |                       |                       |
| Department of the Army                             |                 | 1,214          | 2,987               | 3,424            | 146.1                 | 14.6                  |
| Department of the Navy                             |                 | 4,033          | 5,369               | 6,558            | 33.1                  | 22.2                  |
| System development and demonstration               | 5               | 15,447         | 16,778              | 16,526           | 8.6                   | -1.5                  |
| Defense agencies                                   |                 | 1,109          | 884                 | 604              | -20.3                 | -31.7                 |
| Department of the Air Force                        |                 | 5,377          | 6,691               | 2,615            | 24.4                  | -60.9                 |
| Space Force  |                 | na             | na                  | 3,744            |                       | <u>-</u>              |
| Department of the Army                             |                 | 3,120          | 3,090               | 3,298            | -0.9                  | 6.7                   |
| Department of the Navy                             |                 | 5,841          | 6,114               | 6,265            | 4.7                   | 2.5                   |
| RDT&E management support                           | 6               | 9,074          | 7,217               | 6,987            | -20.5                 | -3.2                  |
| Defense agencies                                   |                 | 1,780          | 1,611               | 1,297            | -9.5                  | -19.5                 |
| Department of the Air Force                        |                 | 3,770          | 2,878               | 2,891            | -23.7                 | 0.5                   |
| Space Force  |                 | na             | na                  | 259              |                       | <u>-</u>              |
| Department of the Army                             |                 | 1,710          | 1,370               | 1,338            | -19.9                 | -2.3                  |
| Department of the Navy                             |                 | 1,438          | 1,130               | 991              | -21.4                 | -12.3                 |
| Operational test and evaluation                    |                 | 377            | 228                 | 210              | -39.6                 | -7.7                  |
| Operational system development                     | 7               | 34,915         | 38,132              | 40,504           | 9.2                   | 6.2                   |
| Defense agencies                                   |                 | 5,280          | 6,469               | 6,673            | 22.5                  | 3.2                   |
| Department of the Air Force                        |                 | 22,983         | 24,565              | 21,472           | 6.9                   | -12.6                 |
| Space Force  |                 | na             | na                  | 4,883            |                       | -                     |
| Department of the Army                             |                 | 1,721          | 1,878               | 2,120            | 9.1                   | 12.9                  |
| Department of the Navy                             |                 | 4,931          | 5,220               | 5,355            | 5.8                   | 2.6                   |
| Adjustment for RDT&E budget authority <sup>C</sup> |                 | -717           | -678                | -118             | na                    | na                    |

## National Center for Science and Engineering Statistics | NSF 21-315

na = not applicable.

DOD = Department of Defense; RDT&E = research, development, test, and evaluation.

- <sup>a</sup> Totals for development spending across all years do not include DOD Budget Activity 7 (BA-7) (Operational Systems Development) due to implementation of the narrowed definition of development described by the Office of Management and Budget (OMB) in its Circular A-11 of July 2016. These BA-7 funds support development efforts to upgrade systems that have been fielded or have received approval for full-rate production and anticipate production funding in the current or subsequent fiscal year.
- <sup>b</sup> RDT&E budget activity codes are broad categories reflecting different types of RDT&E efforts, as specified in the DOD Financial Management Regulation.
- <sup>c</sup> Detailed budget information on DOD RDT&E activities is available only in total obligational authority (TOA), which is the sum of new budget authority, unobligated budget authority from previous years, and other authorized credits. The adjustment converts TOA to budget authority by subtracting unobligated budget authority from previous years and other authorized credits from TOA.

## Note(s):

Detail may not add to total because of rounding. Percent change is calculated on unrounded data.

## Source(s):

Agencies' submissions to OMB per MAX Schedule C, agencies' budget justification documents, supplemental data obtained from agencies' budget offices, and Executive Office of the President, OMB, Budget of the United States Government, Fiscal Year 2021, U.S. Government Printing Office (2020).